

# MAGIC ACip3

## IP Audio Codec



### General

The MAGIC ACip3 is a high-quality Audio Codec which is designed to meet the requirements of a future-proof Audio transmission system.

### Functionality

The optimised signal processor based hardware platform - for highest availability and low power consumption - is equipped with three Ethernet interfaces. They can be used flexibly for Audio over IP transmissions, for system control via the Windows PC Management Software included in the delivery or for the integration into a network management system via SNMP.

The line interfaces can be also configured freely as a main or backup connection. With the Secure Streaming feature, a backup can be realised via two independent IP connections.

If no connection at all can be established, an emergency programme can be played from an SD Card.

The system supports in standard delivery the coding algorithms G.711, G.722, ISO/MPEG Layer 2 and PCM 16/20/24 Bit.

Optionally, the system can be extended with the Enhanced apt-X 16/24 Bit, AAC-LD and AAC-LC+V1/V2 (= HE-AAC-V2) coding algorithms. The system encodes one Stereo programme in the standard version and can optionally be upgraded to a second<sup>1</sup> Stereo programme by software activation.

The Audio programmes can - flexibly and freely assignable - be fed in

or given out, respectively, via an analogue and two digital Stereo interfaces. Besides, a headphones interface is available for monitoring.

In addition to the Audio signals that are to be transmitted data for RDS can be inserted per Stereo programme via separate RS232 interfaces.

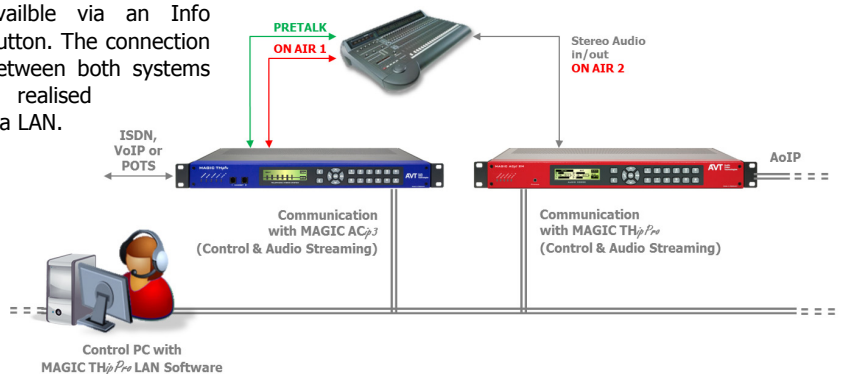
For external signalling and switching commands six programmable GPIO contacts and six relays are available.

As backup of the integrated power supply an external 12V power supply can be optionally connected in redundant mode.

### Option: Integrated solution - Control via Telephone Hybrid PC Software

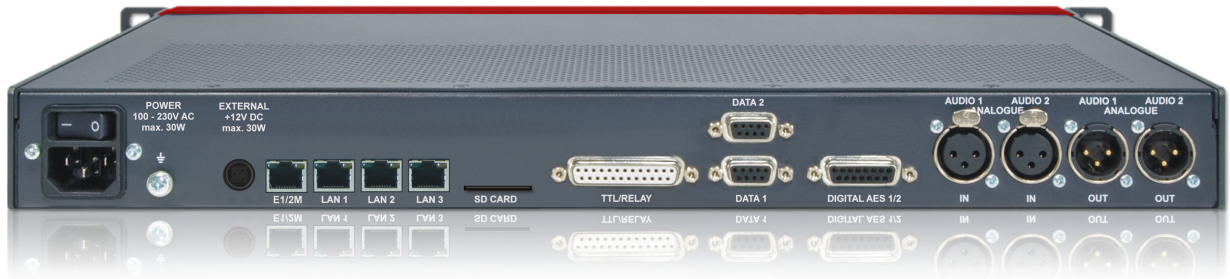
As a special feature MAGIC ACip3 can be integrated in the control software of the MAGIC THipPro Telephone Hybrid System with the MAGIC THipPro ACconnect Upgrade. In this way, only one Management Software is required to control both telephone hybrid and audio codec. Incoming calls to the Audio Codec can be accepted or an outgoing Mono or Stereo connection can be established. Details of the Audio connection are available via an Info button. The connection between both systems is realised via LAN.

- 3 x Ethernet interfaces
- Secure Streaming
- 1 x Stereo analogue Audio interface
- 2 x Stereo AES Audio interface
- ISO/MPEG Layer 2
- PCM 16/20/24 Bit
- Enhanced apt-X 16/24 Bit (optional)
- AAC-LD (optional)
- AAC-LC + HE-AAC V1/V2 (optional)
- GPIO contacts (TTL/Relays)
- SD card slot
- SNMP V1/V2c
- Integrated wide range power supply
- External 12V redundancy power supply (optional)
- Windows PC Software for multi-system control



1) Not available for AAC-LC + HE-AAC V1/V2.

For ISO/MPEG Layer 2 and AAC-LD the system can be configured in the 2-channels mode either as 2-channels Encoder or as 2-channels Decoder.



## Technical Data

|                              |  |                              |  |
|------------------------------|--|------------------------------|--|
| <b>Line Interfaces:</b>      | 3 x Ethernet 10/100 Mbit/s   | <b>Headphones Interface:</b> | Stereo 6,3 mm jack   |
| <b>Coding Algorithms:</b>    | G.711<br>G.722<br>PCM 16/20/24 Bit<br>ISO/MPEG Layer 2<br><br>Optional:<br>Enhanced apt-X 16/24 Bit<br>AAC-LD<br>AAC-LC+V1/V2<br>(HE-AAC-V2) | <b>SD Card Slot:</b>         | yes  |
| <b>Sampling Frequencies:</b> | 8, 16, 24, 32, 48-kHz<br>(depends on Codec)  | <b>Data Interfaces:</b>      | 2 x RS232  |
| <b>Data Rates:</b>           | 8 - 2304-kbit/s<br>(depends on Codec)  | <b>Control Interface:</b>    | via LAN1/2/3   |
| <b>Audio Inputs:</b>         | 1 x Stereo analogue XLR<br>2 x Stereo digital AES<br>SUB-D 15-pin  | <b>TTL Interface (GPIO):</b> | 6 x Input/Output,<br>programmable SUB-D 25-pol.  |
| <b>Audio Outputs:</b>        | 1 x Stereo analogue XLR<br>2 x Stereo digital AES<br>SUB-D 15-pin  | <b>Relay Contacts:</b>       | 6 x NC/NO, programmable<br>SUB-D 25-pol.   |
|                              |  | <b>Power Supply:</b>         | 100 - 230 V AC<br>internal power supply<br><br>Redundancy:<br>+12 V DC external power<br>supply (optional) |
|                              |  | <b>Power Consumption:</b>    | max. 30 W, typ. 15 W   |
|                              |  | <b>Dimensions:</b>           | 19" x 1 U x 26 cm  |
|                              |  | <b>Approvals:</b>            | CE, UL, FCC  |